

ANALYTICAL REPORT

Job Number: 580-5251-1

Job Description: Parkway Du Pont Site

For:
Pacific Environmental and Redevelopment
8424 East Meadow Lake Drive
Snohomish, WA 98290

Attention: Jeff King



Heather Curbow
Project Manager I
hcurbow@stl-inc.com
04/04/2007

Project Manager: Heather Curbow

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Case Narrative for job: 580-J5251-1

Date: 04/04/2007

STL Sacramento analyzed samples for nitro aromatic explosives. The analytical results are at the end of this data package.

METHOD SUMMARY

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Inductively Coupled Plasma - Atomic Emission Spectrometry	STL SEA	SW846 6010B	
Toxicity Characteristic Leaching Procedure	STL SEA		SW846 1311
Acid Digestion of Aqueous Samples and Extracts	STL SEA		SW846 3010A
Acid Digestion of Sediments, Sludges, and Soils	STL SEA		SW846 3050B
Percent Moisture	STL SEA	EPA PercentMoisture	

LAB REFERENCES:

STL SEA = STL Seattle

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986
And Its Updates.

EPA - US Environmental Protection Agency

SAMPLE SUMMARY

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
580-5251-1	F-E-3	Solid	03/13/2007 1134	03/13/2007 1436
580-5251-2	F-C-1	Solid	03/13/2007 1048	03/13/2007 1436
580-5251-3	F-C-1	Solid	03/13/2007 1050	03/13/2007 1436
580-5251-4	F-C-3	Solid	03/13/2007 1046	03/13/2007 1436
580-5251-5	F-C-3	Solid	03/13/2007 1052	03/13/2007 1436
580-5251-6	F-S-1	Solid	03/13/2007 1140	03/13/2007 1436
580-5251-7	F-S-1	Solid	03/13/2007 1142	03/13/2007 1436
580-5251-8	F-S-3	Solid	03/13/2007 1149	03/13/2007 1436
580-5251-9	F-S-3	Solid	03/13/2007 1146	03/13/2007 1436
580-5251-10	F-N-1	Solid	03/13/2007 1112	03/13/2007 1436
580-5251-11	F-N-1	Solid	03/13/2007 1114	03/13/2007 1436
580-5251-12	F-N-3	Solid	03/13/2007 1116	03/13/2007 1436
580-5251-13	13-VS-701	Solid	03/13/2007 1015	03/13/2007 1436
580-5251-14	13-VS-701-D	Solid	03/13/2007 1016	03/13/2007 1436
580-5251-15	13-VS-702	Solid	03/13/2007 1022	03/13/2007 1436
580-5251-16	MAG-VS-1	Solid	03/13/2007 0753	03/13/2007 1436
580-5251-17	MAG-VS-1	Solid	03/13/2007 0758	03/13/2007 1436
580-5251-18	F-W-1	Solid	03/13/2007 1102	03/13/2007 1436
580-5251-19	F-W-1	Solid	03/13/2007 1101	03/13/2007 1436
580-5251-20	F-W-3	Solid	03/13/2007 1108	03/13/2007 1436
580-5251-21	F-W-3	Solid	03/13/2007 1110	03/13/2007 1436
580-5251-22	F-E-1	Solid	03/13/2007 1128	03/13/2007 1436
580-5251-23	F-E-1	Solid	03/13/2007 1130	03/13/2007 1436
580-5251-24	F-E-3	Solid	03/13/2007 1132	03/13/2007 1436
580-5251-25	STOCK PILE	Solid	03/13/2007 1205	03/13/2007 1436
580-5251-26	STOCK PILE	Solid	03/13/2007 1200	03/13/2007 1436

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-C-1

Lab Sample ID: 580-5251-2

Date Sampled: 03/13/2007 1048

Client Matrix: Solid

% Moisture: 21.1

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.1180 g

Date Analyzed: 03/14/2007 2200

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		4.3		0.85

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-C-3

Lab Sample ID: 580-5251-4

Date Sampled: 03/13/2007 1046

Client Matrix: Solid

% Moisture: 10.2

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0189 g

Date Analyzed: 03/14/2007 2251

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.6		0.82

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-S-1

Lab Sample ID: 580-5251-7

Date Sampled: 03/13/2007 1142

Client Matrix: Solid

% Moisture: 21.0

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.5589 g

Date Analyzed: 03/14/2007 2256

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		26		0.61

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-S-3

Lab Sample ID: 580-5251-9

Date Sampled: 03/13/2007 1146

Client Matrix: Solid

% Moisture: 7.4

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0720 g

Date Analyzed: 03/14/2007 2301

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.5		0.76

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-N-1

Lab Sample ID: 580-5251-10

Date Sampled: 03/13/2007 1112

Client Matrix: Solid

% Moisture: 17.6

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0353 g

Date Analyzed: 03/14/2007 2306

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.8		0.88

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: 13-VS-701

Lab Sample ID: 580-5251-13

Client Matrix: Solid

% Moisture: 7.8

Date Sampled: 03/13/2007 1015

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0075 g

Date Analyzed: 03/14/2007 2311

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.3		0.81

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: 13-VS-701-D

Lab Sample ID: 580-5251-14

Client Matrix: Solid

% Moisture: 7.1

Date Sampled: 03/13/2007 1016

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0494 g

Date Analyzed: 03/14/2007 2315

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.1		0.77

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: 13-VS-702

Lab Sample ID: 580-5251-15

Date Sampled: 03/13/2007 1022

Client Matrix: Solid

% Moisture: 6.7

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.2447 g

Date Analyzed: 03/14/2007 2332

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		4.1		0.65

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: MAG-VS-1

Lab Sample ID: 580-5251-16

Date Sampled: 03/13/2007 0753

Client Matrix: Solid

% Moisture: 3.5

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.0280 g

Date Analyzed: 03/14/2007 2337

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		1.5		0.76

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: MAG-VS-1

Lab Sample ID: 580-5251-17

Date Sampled: 03/13/2007 0758

Client Matrix: Solid

% Moisture: 4.8

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.2317 g

Date Analyzed: 03/14/2007 2342

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		2.3		0.64

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-W-1

Lab Sample ID: 580-5251-19

Date Sampled: 03/13/2007 1101

Client Matrix: Solid

% Moisture: 20.1

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.2157 g

Date Analyzed: 03/14/2007 2347

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		3.4		0.77

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-W-3

Lab Sample ID: 580-5251-20

Date Sampled: 03/13/2007 1108

Client Matrix: Solid

% Moisture: 5.1

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.3207 g

Date Analyzed: 03/14/2007 2352

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		1.9		0.60

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-E-1

Lab Sample ID: 580-5251-22

Date Sampled: 03/13/2007 1128

Client Matrix: Solid

% Moisture: 17.3

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.1245 g

Date Analyzed: 03/14/2007 2357

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		3.8		0.81

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: F-E-3

Lab Sample ID: 580-5251-24

Date Sampled: 03/13/2007 1132

Client Matrix: Solid

% Moisture: 10.9

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.3076 g

Date Analyzed: 03/15/2007 0014

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		3.9		0.64

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: STOCK PILE

Lab Sample ID: 580-5251-25
Client Matrix: Solid

Date Sampled: 03/13/2007 1205
Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-TCLP

Method:	6010B	Analysis Batch: 580-16741	Instrument ID:	SEA027
Preparation:	3010A	Prep Batch: 580-16672	Lab File ID:	N/A
Dilution:	1.0	Leachate Batch: 580-16629	Initial Weight/Volume:	50 mL
Date Analyzed:	03/16/2007 1258		Final Weight/Volume:	50 mL
Date Prepared:	03/15/2007 1045			
Date Leached:	03/14/2007 1203			

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier
Lead		1.3	RL

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Client Sample ID: STOCK PILE

Lab Sample ID: 580-5251-26

Date Sampled: 03/13/2007 1200

Client Matrix: Solid

% Moisture: 10.2

Date Received: 03/13/2007 1436

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-16659

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-16631

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.1796 g

Date Analyzed: 03/15/2007 0019

Final Weight/Volume: 50 mL

Date Prepared: 03/14/2007 1210

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		490		0.71

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

General Chemistry

Client Sample ID: STOCK PILE

Lab Sample ID: 580-5251-25

Client Matrix: Solid

Date Sampled: 03/13/2007 1205

Date Received: 03/13/2007 1436

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Solids	92		%	0.10	1.0	PercentMoisture
	Anly Batch: 580-16645	Date Analyzed	03/14/2007 1442			
Percent Moisture	8.0		%	0.10	1.0	PercentMoisture
	Anly Batch: 580-16645	Date Analyzed	03/14/2007 1442			

Quality Control Results

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Method Blank - Batch: 580-16631

Lab Sample ID: MB 580-16631/22-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2153
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631
Units: mg/Kg

Method: 6010B Preparation: 3050B

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Lead	ND		0.75

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 580-16631

Method: 6010B Preparation: 3050B

LCS Lab Sample ID: LCS 580-16631/23-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2227
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631
Units: mg/Kg

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 580-16631/24-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2230
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631
Units: mg/Kg

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Lead	103	101	80 - 120	2	35		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 580-16631

Method: 6010B
Preparation: 3050B

MS Lab Sample ID: 580-5251-2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2215
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0856 g
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 580-5251-2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2219
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0945 g
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Lead	98	99	75 - 125	0	35		

Duplicate - Batch: 580-16631

Method: 6010B
Preparation: 3050B

Lab Sample ID: 580-5251-2
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2007 2205
Date Prepared: 03/14/2007 1210

Analysis Batch: 580-16659
Prep Batch: 580-16631
Units: mg/Kg

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0796 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Lead	4.3	3.84	11	35	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Method Blank - Batch: 580-16672

Lab Sample ID: MB 580-16672/6-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1250
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672
Units: mg/L

Method: 6010B Preparation: 3010A

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Lead	ND		0.015

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 580-16672

Method: 6010B Preparation: 3010A

LCS Lab Sample ID: LCS 580-16672/7-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1322
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672
Units: mg/L

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 580-16672/8-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1327
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672
Units: mg/L

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Lead	105	108	80 - 120	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 580-16672

Method: 6010B
Preparation: 3010A
TCLP

MS Lab Sample ID: 580-5251-25
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1307
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 580-5251-25
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1312
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Lead	100	105	50 - 150	4	20		

Duplicate - Batch: 580-16672

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID: 580-5251-25
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2007 1303
Date Prepared: 03/15/2007 1045

Analysis Batch: 580-16741
Prep Batch: 580-16672
Units: mg/L

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Lead	1.3	1.25	3	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.



STL

March 29, 2007

STL Sacramento
880 Riverside Parkway
West Sacramento, CA 95605

Tel: 916 373 5600
Fax: 916 372 1059
www.stl-inc.com

STL SACRAMENTO PROJECT NUMBER: G7C150327
PO/CONTRACT: 580-5251

Heather Curbow
STL Seattle
5755 8th Street East
Tacoma, WA 98424

Dear Ms. Curbow,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on March 15, 2007. These samples are associated with your 580-5251 project.

The test results in this report meet all NELAP requirements for parameters that accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4402.

Sincerely,

A handwritten signature in black ink that reads "Jill Kellmann".

Jill Kellmann
Project Manager

TABLE OF CONTENTS

STL SACRAMENTO PROJECT NUMBER G7C150327

Case Narrative

STL Sacramento Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

SOLID, 8330, Nitroaromatics & Nitramines

Samples: 1 through 10

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

Full Raw Data Package

CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G7C150327

SOLID, 8330, Nitroaromatics & Nitramines

Samples: 1 through 10

The matrix spike/matrix spike duplicate (MS/MSD) recoveries were outside criteria. Acceptable laboratory control sample data (LCS) analysis data demonstrate that the analytical system was operating in control. This condition is most likely due to a matrix effect.

Please note historically ash samples have poor to no recoveries for nitro-aromatic compounds.

There were no other anomalies associated with this project.

STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon*	CA 200005
Arizona	AZ0616	Pennsylvania	68-1272
Arkansas	04-067-0	South Carolina	87014002
California*	01119CA	Texas	TX 270-2004A
Colorado	NA	Utah*	QUAN1
Connecticut	PH-0691	Virginia	00178
Florida*	F87570	Washington	C087
Georgia	960	West Virginia	9930C, 334
Hawaii	NA	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA442	USDA Foreign Plant	87-82605
New Jersey*	CA005	USDA Foreign Soil	S-46613
New York*	11666		

*NELAP accredited. A more detailed parameter list is available upon request. Update 1/27/05

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD is only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Sample Summary

G7C150327

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
JQ506	1	F-B-3(580-5251-1)	3/13/2007 11:34 AM	3/15/2007 09:15 AM
JQ51C	2	F-C-1(580-5251-3)	3/13/2007 10:50 AM	3/15/2007 09:15 AM
JQ51J	3	F-C-3(580-5251-5)	3/13/2007 10:52 AM	3/15/2007 09:15 AM
JQ51N	4	F-S-1(580-5251-6)	3/13/2007 11:40 AM	3/15/2007 09:15 AM
JQ51Q	5	F-S-3(580-5251-8)	3/13/2007 11:49 AM	3/15/2007 09:15 AM
JQ51V	6	F-N-1(580-5251-11)	3/13/2007 11:14 AM	3/15/2007 09:15 AM
JQ510	7	F-N-3(580-5251-12)	3/13/2007 11:16 AM	3/15/2007 09:15 AM
JQ512	8	F-W-1(580-5251-18)	3/13/2007 11:02 AM	3/15/2007 09:15 AM
JQ515	9	F-W-3(580-5251-21)	3/13/2007 11:10 AM	3/15/2007 09:15 AM
JQ516	10	F-B-1(580-5251-23)	3/13/2007 11:30 AM	3/15/2007 09:15 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

STL Seattle

5755 9th Street East

Tacoma, WA 98424

Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

SEVERN
TRENT
STL

Severn Trent Laboratories, Inc.

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving: Company: Address: City: State: Zip: Phone: Email: Project Name: Site:		Sampler: Phone: Lab PM: E-Mail: Currow, Heather hcurrow@stl-inc.com		Carrier Tracking Note: STC No: 580-805.1 Page 1 of 1 STL Job #: 580-5251-1	
Due Date Requested: 3/23/2007 TAT Requested (days): PO #: WO #: Project #: 5800657 SSOW#:		Analysis Requested			
Sample Identification Client ID (Lab ID)		Sample Date		Sample Time	
F-E-3 (580-5251-1)		3/13/07		11:34	
F-C-1 (580-5251-3)		3/13/07		10:50	
F-C-3 (580-5251-5)		3/13/07		10:52	
F-S-1 (580-5251-6)		3/13/07		11:40	
F-S-3 (580-5251-8)		3/13/07		11:49	
F-N-1 (580-5251-11)		3/13/07		11:14	
F-N-3 (580-5251-12)		3/13/07		11:16	
F-W-1 (580-5251-18)		3/13/07		11:02	
F-W-3 (580-5251-21)		3/13/07		11:10	
F-E-1 (580-5251-23)		3/13/07		11:30	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Sub Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: Relinquished by: Relinquished by:		Date: Date: Date: Date:		Time: Time: Time: Time:	
Relinquished by: Relinquished by: Relinquished by:		Company: Company: Company:		Date/Time: Date/Time: Date/Time:	
Relinquished by: Relinquished by:		Company: Company:		Date/Time: Date/Time:	
Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Cooler Temperature(s) °C and Other Remarks: 2°C			



STL

LOT RECEIPT CHECKLIST STL Sacramento

CLIENT STL - Seattle PM IK LOG # 44213
LOT# (QUANTIMS ID) 67050327 QUOTE# 45270 LOCATION W18B

DATE RECEIVED 3-15-07 TIME RECEIVED 915 Initials AK Date 3-15-07

DELIVERED BY ☒ FEDEX ☐ CA OVERNIGHT ☐ CLIENT
☐ AIRBORNE ☐ GOLDENSTATE ☐ DHL
☐ UPS ☐ BAX GLOBAL ☐ GO-GETTERS
☐ STL COURIER ☐ COURIERS ON DEMAND
☐ OTHER

CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A
CUSTODY SEAL #(S) Seal 9-931252, 931252

SHIPPING CONTAINER(S) ☐ STL ☒ CLIENT ☐ N/A
TEMPERATURE RECORD (IN °C) IR 1 ☐ 3 ☐ OTHER 4

COC #(S) 931252, 931252

TEMPERATURE BLANK Observed: N/A Corrected: _____

SAMPLE TEMPERATURE

Observed: 1 2 3 Average: 2 Corrected Average: 2

COLLECTOR'S NAME: ☐ Verified from COC ☒ Not on COC

pH MEASURED ☐ YES ☐ ANOMALY ☒ N/A

LABELED BY _____

LABELS CHECKED BY _____

PEER REVIEW ☒ NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING

WETCHEM ☒ N/A

VOA-ENCORES ☒ N/A

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☒ N/A

☒ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH
APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A

☐ Clouseau ☐ TEMPERATURE EXCEEDED (2 °C - 6 °C) ☒ N/A

☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED

☐ PM NOTIFIED

Notes: _____

*1 Acceptable temperature range for State of Wisconsin samples is $\leq 4^{\circ}\text{C}$.

LEAVE NO SPACES BLANK. USE "N/A" IF NOT APPLICABLE. INITIAL AND DATE ALL "N/A" ENTRIES.

Lot
ID:

G7C150327

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
VOAH*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
CGJ																				
500CGJ																				
250CGJ																				
125CGJ	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

r = hydrochloric acid s = sulfuric acid na = sodium hydroxide n = nitric acid zn = zinc acetate

number of VOAs with air bubbles present / total number of VOAs

QA-185 3/05 EM

Page 2

SOLID, 8330, Nitroaromatics & Nitramines

STL SEATTLE

Client Sample ID: F-E-3(580-5251-1)

HPLC

Lot-Sample #....: G7C150327-001 Work Order #....: JQ5061AA Matrix.....: SOLID
 Date Sampled....: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/23/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99 Method.....: SW845 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	101	(82 - 119)	

STL SEATTLE

Client Sample ID: F-C-1(580-5251-3)

HPLC

Lot-Sample #...: G7C150327-002 Work Order #...: JQ5101AA Matrix.....: SOLID
 Date Sampled...: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #...: 7080509
 Dilution Factor: 1.01 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	103	(82 - 119)	

STL SEATTLE

Client Sample ID: F-C-3(580-5251-5)

HPLC

Lot-Sample #....: G7C150327-003 Work Order #....: JQ51J1AA Matrix.....: SOLID
 Date Sampled....: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	100	(82 - 119)	

STL SEATTLE

Client Sample ID: F-S-1(580-5251-6)

HPLC

Lot-Sample #...: G7C150327-004 Work Order #...: JQ51N1AA Matrix.....: SOLID
 Date Sampled...: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #...: 7080509
 Dilution Factor: 0.98 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.24	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.24	mg/kg
1,3-Dinitrobenzene	ND	0.24	mg/kg
2,4-Dinitrotoluene	ND	0.24	mg/kg
2,6-Dinitrotoluene	ND	0.24	mg/kg
HMX	ND	0.24	mg/kg
Nitrobenzene	ND	0.24	mg/kg
2-Nitrotoluene	ND	0.24	mg/kg
3-Nitrotoluene	ND	0.24	mg/kg
4-Nitrotoluene	ND	0.24	mg/kg
RDX	ND	0.24	mg/kg
Tetryl	ND	0.24	mg/kg
1,3,5-Trinitrobenzene	ND	0.24	mg/kg
2,4,6-Trinitrotoluene	ND	0.24	mg/kg
	PERCENT RECOVERY	RECOVERY LIMITS	
3,4-Dinitrotoluene	99	(82 - 119)	

STL SEATTLE

Client Sample ID: F-S-3(580-5251-8)

HPLC

Lot-Sample #....: G7C150327-005 Work Order #....: JQ51Q1AA Matrix.....: SOLID
 Date Sampled...: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	99	(82 - 119)	

STL SEATTLE

Client Sample ID: F-N-1(580-5251-11)

HPLC

Lot-Sample #....: G7C150327-006 Work Order #....: JQ51V1AA Matrix.....: SOLID
 Date Sampled....: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 1 Method.....: SWB46 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
3,4-Dinitrotoluene	99	(82 - 119)	

STL SEATTLE

Client Sample ID: F-N-3(580-5251-12)

HPLC

Lot-Sample #...: G7C150327-007 Work Order #...: JQ5101AA Matrix.....: SOLID
 Date Sampled...: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #...: 7080509
 Dilution Factor: 1.01 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
3,4-Dinitrotoluene	102	(82 - 119)	

STL SRATTLE

Client Sample ID: F-W-1(580-5251-18)

HPLC

Lot-Sample #....: G7C150327-008 Work Order #....: JQ3121AA Matrix.....: SOLID
 Date Sampled....: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(82 - 119)

STL SEATTLE

Client Sample ID: F-W-3(580-5251-21)

HPLC

Lot-Sample #....: G7C150327-009 Work Order #....: JQ5151AA Matrix.....: SOLID
 Date Sampled...: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 1.01 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	103	(82 - 119)	

STL SEATTLE

Client Sample ID: F-E-1(580-5251-23)

HPLC

Lot-Sample #....: G7C150327-010 Work Order #....: JQ5161AA Matrix.....: SOLID
 Date Sampled....: 03/13/07 Date Received...: 03/15/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/24/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99 Method.....: SW846 8330

PARAMETER	RESULT	REPORTING LIMIT	UNITS
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg
1,3-Dinitrobenzene	ND	0.25	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
HMX	ND	0.25	mg/kg
Nitrobenzene	ND	0.25	mg/kg
2-Nitrotoluene	ND	0.25	mg/kg
3-Nitrotoluene	ND	0.25	mg/kg
4-Nitrotoluene	ND	0.25	mg/kg
RDX	ND	0.25	mg/kg
Tetryl	ND	0.25	mg/kg
1,3,5-Trinitrobenzene	ND	0.25	mg/kg
2,4,6-Trinitrotoluene	ND	0.25	mg/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
3,4-Dinitrotoluene	98	(82 - 119)	

QC DATA ASSOCIATION SUMMARY

G7C150327

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8330		7080509	7081202
002	SOLID	SW846 8330		7080509	7081202
003	SOLID	SW846 8330		7080509	7081202
004	SOLID	SW846 8330		7080509	7081202
005	SOLID	SW846 8330		7080509	7081202
006	SOLID	SW846 8330		7080509	7081202
007	SOLID	SW846 8330		7080509	7081202
008	SOLID	SW846 8330		7080509	7081202
009	SOLID	SW846 8330		7080509	7081202
010	SOLID	SW846 8330		7080509	7081202

METHOD BLANK REPORT

HPLC

Client Lot #...: G7C150327
 MB Lot-Sample #: G7C210000-509

Work Order #...: JRG2K1AA

Matrix.....: SOLID

Analysis Date...: 03/23/07
 Dilution Factor: 1

Prep Date.....: 03/21/07

Prep Batch #...: 7080509

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Amino-4,6-dinitrotoluene	ND	0.25	mg/kg	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	0.25	mg/kg	SW846 8330
1,3-Dinitrobenzene	ND	0.25	mg/kg	SW846 8330
2,4-Dinitrotoluene	ND	0.25	mg/kg	SW846 8330
2,6-Dinitrotoluene	ND	0.25	mg/kg	SW846 8330
HMX	ND	0.25	mg/kg	SW846 8330
Nitrobenzene	ND	0.25	mg/kg	SW846 8330
2-Nitrotoluene	0.17 J	0.25	mg/kg	SW846 8330
3-Nitrotoluene	ND	0.25	mg/kg	SW846 8330
4-Nitrotoluene	ND	0.25	mg/kg	SW846 8330
RDX	ND	0.25	mg/kg	SW846 8330
Tetryl	ND	0.25	mg/kg	SW846 8330
1,3,5-Trinitrobenzene	ND	0.25	mg/kg	SW846 8330
2,4,6-Trinitrotoluene	ND	0.25	mg/kg	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	106	(82 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #....: G7C150327 Work Order #....: JRG2K1AC Matrix.....: SOLID
 LCS Lot-Sample#: G7C210000-509
 Prep Date.....: 03/21/07 Analysis Date...: 03/23/07
 Prep Batch #....: 7080509
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	1.00	0.948	mg/kg	95	SW846 8330
4-Amino-2,6-dinitrotoluene	1.00	0.978	mg/kg	98	SW846 8330
1,3-Dinitrobenzene	1.00	0.961	mg/kg	96	SW846 8330
2,4-Dinitrotoluene	1.00	0.968	mg/kg	97	SW846 8330
2,6-Dinitrotoluene	1.00	0.970	mg/kg	97	SW846 8330
HMX	1.00	0.959	mg/kg	96	SW846 8330
Nitrobenzene	1.00	0.970	mg/kg	97	SW846 8330
2-Nitrotoluene	1.00	1.03	mg/kg	103	SW846 8330
3-Nitrotoluene	1.00	0.972	mg/kg	97	SW846 8330
4-Nitrotoluene	1.00	0.961	mg/kg	96	SW846 8330
RDX	1.00	0.960	mg/kg	96	SW846 8330
Tetryl	1.00	0.990	mg/kg	99	SW846 8330
1,3,5-Trinitrobenzene	1.00	0.960	mg/kg	96	SW846 8330
2,4,6-Trinitrotoluene	1.00	0.961	mg/kg	96	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(82 - 119)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #....: G7C150327 Work Order #....: JRG2K1AC Matrix.....: SOLID
 LCS Lot-Sample#: G7C210000-509
 Prep Date.....: 03/21/07 Analysis Date...: 03/23/07
 Prep Batch #....: 7080509
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
2-Amino-4,6-dinitrotoluene	95	(84 - 114)	SW846 8330
4-Amino-2,6-dinitrotoluene	98	(84 - 114)	SW846 8330
1,3-Dinitrobenzene	96	(85 - 115)	SW846 8330
2,4-Dinitrotoluene	97	(81 - 115)	SW846 8330
2,6-Dinitrotoluene	97	(84 - 114)	SW846 8330
HMX	96	(87 - 117)	SW846 8330
Nitrobenzene	97	(85 - 115)	SW846 8330
2-Nitrotoluene	103	(84 - 114)	SW846 8330
3-Nitrotoluene	97	(88 - 118)	SW846 8330
4-Nitrotoluene	96	(84 - 114)	SW846 8330
RDX	96	(85 - 115)	SW846 8330
Tetryl	99	(75 - 109)	SW846 8330
1,3,5-Trinitrobenzene	96	(80 - 113)	SW846 8330
2,4,6-Trinitrotoluene	96	(82 - 114)	SW846 8330

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
3,4-Dinitrotoluene	103	(82 - 119)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G7C150327 Work Order #...: JQON11A7-MS Matrix.....: SOLID
 MS Lot-Sample #: A7C130304-003 JQON11A8-MSD
 Date Sampled...: 03/12/07 Date Received...: 03/13/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/25/07
 Prep Batch #...: 7080509
 Dilution Factor: 0.98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	ND	1.00	0.912	mg/kg	91		SW846 8330
	ND	1.00	0.937	mg/kg	94	2.7	SW846 8330
4-Amino-2,6-dinitrotoluene	ND	1.00	0.967	mg/kg	97		SW846 8330
	ND	1.00	0.968	mg/kg	97	0.16	SW846 8330
1,3-Dinitrobenzene	ND	1.00	0.938	mg/kg	94		SW846 8330
	ND	1.00	0.957	mg/kg	96	2.1	SW846 8330
2,4-Dinitrotoluene	ND	1.00	0.924	mg/kg	92		SW846 8330
	ND	1.00	0.956	mg/kg	96	3.4	SW846 8330
2,6-Dinitrotoluene	ND	1.00	0.924	mg/kg	92		SW846 8330
	ND	1.00	0.957	mg/kg	96	3.5	SW846 8330
HMX	ND	1.00	0.944	mg/kg	94		SW846 8330
	ND	1.00	0.959	mg/kg	96	1.6	SW846 8330
Nitrobenzene	ND	1.00	0.921	mg/kg	92		SW846 8330
	ND	1.00	0.969	mg/kg	97	5.0	SW846 8330
2-Nitrotoluene	0.14	1.00	0.987	mg/kg	84		SW846 8330
	0.14	1.00	1.02	mg/kg	88	3.4	SW846 8330
3-Nitrotoluene	ND	1.00	0.902	mg/kg	90		SW846 8330
	ND	1.00	0.963	mg/kg	96	6.6	SW846 8330
4-Nitrotoluene	ND	1.00	0.897	mg/kg	90		SW846 8330
	ND	1.00	0.946	mg/kg	95	5.3	SW846 8330
RDX	ND	1.00	0.908	mg/kg	91		SW846 8330
	ND	1.00	0.917	mg/kg	92	1.1	SW846 8330
Tetryl	ND	1.00	0.954	mg/kg	95		SW846 8330
	ND	1.00	0.982	mg/kg	98	2.9	SW846 8330
1,3,5-Trinitrobenzene	ND	1.00	0.942	mg/kg	94		SW846 8330
	ND	1.00	0.962	mg/kg	96	2.1	SW846 8330
2,4,6-Trinitrotoluene	ND	1.00	0.921	mg/kg	92		SW846 8330
	ND	1.00	0.947	mg/kg	95	2.8	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(82 - 119)
	99	(82 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G7C150327 Work Order #...: JQ0N11A7-MS Matrix.....: SOLID
 MS Lot-Sample #: A7C130304-003 JQ0N11A8-MSD
 Date Sampled...: 03/12/07 Date Received...: 03/13/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/25/07
 Prep Batch #...: 7080509
 Dilution Factor: 0.98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	91	(84 - 114)			SW846 8330
	94	(84 - 114)	2.7	(0-25)	SW846 8330
4-Amino-2,6-dinitrotoluene	97	(84 - 114)			SW846 8330
	97	(84 - 114)	0.16	(0-20)	SW846 8330
1,3-Dinitrobenzene	94	(85 - 115)			SW846 8330
	96	(85 - 115)	2.1	(0-20)	SW846 8330
2,4-Dinitrotoluene	92	(81 - 115)			SW846 8330
	96	(81 - 115)	3.4	(0-22)	SW846 8330
2,6-Dinitrotoluene	92	(84 - 114)			SW846 8330
	96	(84 - 114)	3.5	(0-31)	SW846 8330
HMX	94	(87 - 117)			SW846 8330
	96	(87 - 117)	1.6	(0-20)	SW846 8330
Nitrobenzene	92	(85 - 115)			SW846 8330
	97	(85 - 115)	5.0	(0-20)	SW846 8330
2-Nitrotoluene	84	(84 - 114)			SW846 8330
	88	(84 - 114)	3.4	(0-46)	SW846 8330
3-Nitrotoluene	90	(88 - 118)			SW846 8330
	96	(88 - 118)	6.6	(0-39)	SW846 8330
4-Nitrotoluene	90	(84 - 114)			SW846 8330
	95	(84 - 114)	5.3	(0-20)	SW846 8330
RDX	91	(85 - 115)			SW846 8330
	92	(85 - 115)	1.1	(0-29)	SW846 8330
Tetryl	95	(75 - 109)			SW846 8330
	98	(75 - 109)	2.9	(0-20)	SW846 8330
1,3,5-Trinitrobenzene	94	(80 - 113)			SW846 8330
	96	(80 - 113)	2.1	(0-20)	SW846 8330
2,4,6-Trinitrotoluene	92	(82 - 114)			SW846 8330
	95	(82 - 114)	2.8	(0-22)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	98	(82 - 119)
	99	(82 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #....: G7C150327 Work Order #....: JRA8H1DP-MS Matrix.....: SOLID
 MS Lot-Sample #: C7C190141-001 JRA8H1DQ-MSD
 Date Sampled....: 03/16/07 Date Received...: 03/19/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/23/07
 Prep Batch #....: 7080509
 Dilution Factor: 0.99

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD
RDX	ND	1.00	0.597	mg/kg	60 a		SW846 8330
	ND	1.00	0.434	mg/kg	43 a,p	32	SW846 8330
Tetryl	ND	1.00		mg/kg	0.0		SW846 8330
	ND	1.00		mg/kg	0.0	0.0	SW846 8330
2,4,6-Trinitrotoluene	0.032	1.00	0.0232	mg/kg	0.0 a		SW846 8330
	0.032	1.00		mg/kg	0.0	200	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	10 *	(82 - 119)
	0.0 *	(82 - 119)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

- * Surrogate recovery is outside stated control limits.
- a Spiked analyte recovery is outside stated control limits.
- p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G7C150327 Work Order #...: JRA8H1DP-MS Matrix.....: SOLID
 MS Lot-Sample #: C7C190141-001 JRA8H1DQ-MSD
 Date Sampled...: 03/16/07 Date Received...: 03/19/07
 Prep Date.....: 03/21/07 Analysis Date...: 03/23/07
 Prep Batch #...: 7080509
 Dilution Factor: 0.99

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
RDX	60 a	(85 - 115)			SW846 8330
	43 a,p	(85 - 115)	32	(0-29)	SW846 8330
Tetryl	0.0	(75 - 109)			SW846 8330
	0.0	(75 - 109)	0.0	(0-20)	SW846 8330
2,4,6-Trinitrotoluene	0.0 a	(82 - 114)			SW846 8330
	0.0	(82 - 114)	200	(0-22)	SW846 8330

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	10 *	(82 - 119)
	0.0 *	(82 - 119)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

- * Surrogate recovery is outside stated control limits.
- a Spiked analyte recovery is outside stated control limits.
- p Relative percent difference (RPD) is outside stated control limits.

Chain of Custody Record
STL
SEVERN
TRENT
 STL Seattle
 5755 8th Street E.
 Tacoma, WA 98424
 Tel. 253-922-2310
 Fax 253-922-5047
 www.stl-inc.com
 Pacific Environmental + Redevelopment 1841

Client: 9424 E. Meadow Lk. Dr. Address: WA 98290 State: WA Zip Code: 98290
 Project Manager: BRAD GRIMSTED Date: 3/13/07 Chain of Custody Number: 22799
 Telephone Number (Area Code/Fax Number): 360-570-1700 Lab Number: 3 Page: 1 of 3

City: Snohomish State: WA Zip Code: 98290
 Project Name and Location (State): Parkway Dupont WA
 Contract/Purchase Order/Quote No.:

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH			
F-E-3	3/13/07	11:34													
F-C-1	3/13/07	10:48													
F-C-1	3/13/07	10:50													
F-C-3	3/13/07	10:46													
F-C-3	3/13/07	10:52													
F-S-1	3/13/07	11:40													
F-S-1	3/13/07	11:42													
F-S-3	3/13/07	11:49													
F-S-3	3/13/07	11:46													
F-N-1	3/13/07	11:12													
F-N-1	3/13/07	11:44													
F-N-3	3/13/07	11:46													

Cooler: ☒ Yes ☐ No Cooler Temp:
 Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Sample Disposal ☐ Disposal By Lab ☐ Return To Client ☐ Archive For Months ☐ (A fee may be assessed if samples are retained longer than 1 month)
 Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other 5TD
 Relinquished By: [Signature] Date: 3/13/07 Time: 12:36
 Relinquished By: [Signature] Date: 3/13/07 Time: 14:30
 Relinquished By: Date: Time:

STL Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.stl-inc.com

Chain of Custody Record

SEVERN
TRENT
STL®

Client: Pacific Environmental + Redevelopment Corp Project Manager: BLAD GIMSTED Date: 3/13/07 Chain of Custody Number: 22798
Address: 8424 E. Meadows Lk Dr. Telephone Number (Area Code)/Fax Number: 360-570-1700 Lab Number: 2 of 3
City: Shoemish State: WA Zip Code: 98290 Site Contact: 360-570-1700 Lab Contact: 360-570-1700
Project Name and Location (State): PARKWAY Dupont WA Carrier/Waybill Number: _____

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)					Special Instructions/ Conditions of Receipt
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH						
13-US-701	3/13/07	10:15				X												
13-US-701-D	3/13/07	10:16				X												
13-US-702	3/13/07	10:22				X												
13-US-702	3/13/07	7:53				X												
13-US-702	3/13/07	7:58				X												
13-US-702	3/13/07	11:02				X												
13-US-702	3/13/07	11:01				X												
13-US-702	3/13/07	11:08				X												
13-US-702	3/13/07	11:10				X												
13-US-702	3/13/07	11:28				X												
13-US-702	3/13/07	11:30				X												
13-US-702	3/13/07	11:32				X												

Cooler: ☒ Yes ☐ No Cooler Temp: _____ Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Archive For _____ Months ☐ Sample Disposal ☐ Disposal By Lab (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☐ Other STD

1. Relinquished By: [Signature] Date: 3/13/07 Time: 2:36 1. Received By: GJR Date: 3/13/07 Time: 14:30
2. Relinquished By: _____ Date: _____ Time: _____ 2. Received By: _____ Date: _____ Time: _____
3. Relinquished By: _____ Date: _____ Time: _____ 3. Received By: _____ Date: _____ Time: _____

Comments: _____

STI Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.sti-inc.com

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TRENT

[illegible]

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Pacific Environmental and Redevelopment

Job Number: 580-5251-1

Login Number: 5251

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	NA	Client Dropped off in SR
Cooler Temperature is acceptable.	NA	
Cooler Temperature is recorded.	NA	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

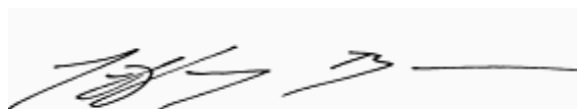
ANALYTICAL REPORT

Job Number: 580-6161-1

Job Description: Du Pont Site

For:
Pacific Environmental and Redevelopment
8424 East Meadow Lake Drive
Snohomish, WA 98290

Attention: Jeff King



Tiffany Ryan
Project Mgmt. Assistant
tryan@stl-inc.com
06/12/2007

cc: Brad Grimsted

Project Manager: Heather Curbow

STL Seattle is a part of Severn Trent Laboratories, Inc.

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METHOD SUMMARY

Client: Pacific Environmental and Redevelopment

Job Number: 580-6161-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Inductively Coupled Plasma - Atomic Emission Spectrometry	STL SEA	SW846 6010B	
Acid Digestion of Sediments, Sludges, and Soils	STL SEA		SW846 3050B
Percent Moisture	STL SEA	EPA PercentMoisture	

LAB REFERENCES:

STL SEA = STL Seattle

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986
And Its Updates.

EPA - US Environmental Protection Agency

SAMPLE SUMMARY

Client: Pacific Environmental and Redevelopment

Job Number: 580-6161-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
580-6161-1	F-N-3	Solid	06/11/2007 1030	06/11/2007 1105

Analytical Data

Client: Pacific Environmental and Redevelopment

Job Number: 580-6161-1

Client Sample ID: F-N-3

Lab Sample ID: 580-6161-1

Client Matrix: Solid

% Moisture: 14.6

Date Sampled: 06/11/2007 1030

Date Received: 06/11/2007 1105

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B

Analysis Batch: 580-19460

Instrument ID: SEA027

Preparation: 3050B

Prep Batch: 580-19397

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 1.2907 g

Date Analyzed: 06/11/2007 1708

Final Weight/Volume: 50 mL

Date Prepared: 06/11/2007 0952

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		110		1.4

Quality Control Results

Client: Pacific Environmental and Redevelopment

Job Number: 580-6161-1

Method Blank - Batch: 580-19397

Lab Sample ID: MB 580-19397/12-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 06/11/2007 1600
Date Prepared: 06/11/2007 0952

Analysis Batch: 580-19460
Prep Batch: 580-19397
Units: mg/Kg

Method: 6010B Preparation: 3050B

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Lead	ND		1.5

Lab Control Spike/ Lab Control Spike Duplicate Recovery Report - Batch: 580-19397

Method: 6010B Preparation: 3050B

LCS Lab Sample ID: LCS 580-19397/13-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 06/11/2007 1629
Date Prepared: 06/11/2007 0952

Analysis Batch: 580-19460
Prep Batch: 580-19397
Units: mg/Kg

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 580-19397/14-AA
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 06/11/2007 1633
Date Prepared: 06/11/2007 0952

Analysis Batch: 580-19460
Prep Batch: 580-19397
Units: mg/Kg

Instrument ID: SEA027
Lab File ID: N/A
Initial Weight/Volume: 1.0 g
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Lead	103	103	80 - 120	0	35		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client

Address

City

State

Zip Code

Project Name and Location (State)

Contract/Purchase Order/Quote No.

Project Manager

BRAD GRIMSTED

Telephone Number (Area Code/Fax Number)

360-570-1700

Site Contact

BRAD G

Carrier/Waybill Number

Date

6/11/07

Chain of Custody Number

22803

Lab Number

61601

Page

1 of 1

Analysis (Attach list if more space is needed)

Lead only

Containers & Preservatives

NaOH

ZnAc

HCl

HNO3

H2SO4

Unpres

Soil

Sed

Aqueous

Air

Time

6/11/07 10:30

Matrix

Sample I.D. and Location/Description

(Containers for each sample may be combined on one line)

F-N-3

Date

6/11/07 10:30

Special Instructions/Conditions of Receipt

Lead only

Cooler

Yes

No

Cooler Temp.

Possible Hazard Identification

Non-Hazard

Flammable

Flammable

Turn Around Time Required (business days)

24 Hours

48 Hours

5 Days

10 Days

15 Days

Other

Relinquished By

Relinquished By

Sample Disposal

Return To Client

Archive For

Months

Disposal By Lab

Archive For

Months

(A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify)

1. Received By

2. Received By

3. Received By

Date

6/11/07

Time

11:05

Date

6/11/07

Time

11:05

Date

Time

Comments

Page 6 of 7

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

STL0274-500 (12/02)

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Pacific Environmental and Redevelopment

Job Number: 580-6161-1

Login Number: 6161

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		